Workshop of the G20 end use data and energy efficiency metrics initiative

Weekly Electricity Consumption Index for the monitoring of the main Industrial sectors in Italy

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The weekly index was constructed starting from the measurements of the weekly consumptions of approximately 530 energy intensive customers (directly connected to high voltage and of which Terna is responsible for the measurement) and that represent around 25% of total electricity used in industry sector.

These customers were reclassified on the basis of the Ateco2007 Codes and aggregated by product class. Therefore, six statistically significant aggregates were built (Buildings materials - Steelwork - Chemistry - Mechanics - Transport - Non-ferrous metals).

For the purpose of analyzing the impacts of the current crisis, the dimensionless index was constructed using 100 as the basis for the first week of February 2020. The graphical representation therefore allows you to compare the performance of the individual weeks of 2020 with both the previous weeks and the similar weeks of the year 2019. The variations highlighted are referred to the last week of the figure (vs the previous week or vs the same week of the previous year).
The trend analysis was developed by taking into consideration the weekly consumption of the year 2020, comparing them with the consumption of the same weeks of 2019.

**WOW**
+1%
+9,1 GWh

**YoY**
-3%
-16,8 GWh
WEEKLY COMPARISON

STEEL

WoW +2% +5,1 GWh
YoY -3% -8,7 GWh

MECHANICS

WoW -3% +1,3 GWh
YoY -6% -3,2 GWh

CHEMICAL

WoW +1% +1,0 GWh
YoY -6% -4,2 GWh

NON-FERROUS METALS

WoW -3% -1,0 GWh
YoY -7% -2,7 GWh
Trend of the IMCEI index by commodity classes

WEEKLY COMPARISON

BUILDING MATERIALS

WoW
+10%
+3.7 GWh

YoY
+5%
+1.9 GWh

Machinery of TRANSPORT

WoW
+14%
+0.3 GWh

YoY
-1%
-1.8 GWh
Conclusion

The weekly index was very well appreciated from the politicians and technics of the Ministries that have in charge the monitoring of the economic activities;

In particular in time of Pandemic (COVID-19) it could be an adjunctive instrument for the monitoring of the situation in real time (just one week of distance from the reality);

It is very useful for the discrimination of the financial help to the sectors that in real are suffering in the crisis loss of production.

We are looking for to increase the number of industries involved.

It seems very simple and easy to share with the “non expert” public even, if until now, it was not released at the general population but only at selected group of analysts, in particular for the prevision of the electricity request on the grid.